

AMENDMENT UNDER 37 C.F.R. § 1.116
U.S. Appln. No.: 09/777,681

REMARKS

Claims 1-22 remain pending in the application. Claims 1-5, 8, 10-11 and 15-22 have been rejected under 35 U.S.C. § 103 as being unpatentable over Lazarev in view of Wilder. Claims 6-7, 9 and 13-14 have been rejected under 35 U.S.C. § 103 as being unpatentable over Lazarev in view of Wilder and further in view of Talmi. All references are previously of record. Applicant submits the following arguments in traversal of the rejection.

The Examiner reiterates the arguments previously of record in rejecting the claims over the combinations of Lazarev, Wilder and Talmi and also offers rebuttals to previously submitted arguments. For purposes of expediting prosecution, Applicant includes the subject matter of dependent claims 15-19 into their respective independent claims 1-5. Applicant submits that the amendments should be entered because they raise no new issues in need of further consideration because they were previously pending before the Examiner.

Applicant would like to emphasize that the invention reduces noise signal sources in an image pick up device. Referring to Fig. 2, a non-imaging area 25 of the CCD is covered by an opaque material. The CCD driver includes information representing areas of the fluorescence imaging region 24 and the non-imaging region 25. Applicant's invention prevents read out of areas that correspond to the non-imaging areas or alter the reading at the non-imaging sites to permit high speed read out with reduced noise effects that would be attributable to signals in the non-image area.

The Examiner continues to rely on Fig. 3 of Lazarev to teach an imaging and non-imaging area. It was previously submitted that the imaging regions (A, B) of Lazarev could not

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be known *a priori* and as a result, the image and non-image regions would not be treated differently since the entirety of the pick up device would correspond to an imaging area. In response, the Examiner continues to allege that the image region of Wilder can be known *a priori* in the event certain optical mechanisms in Lazarev operate in a particularized manner to provide a constant field, and therefore known non-imaging areas. The Examiner relies on the probabilistic statement for these operations to support the rejection. It is well settled, however, that probabilities of the occurrence of certain features do not support prior art rejections.

The Examiner's rejection also makes a second assumption regarding the operation of Lazarev. Even assuming arguendo that region C is known *a priori*, the teachings of Lazarev do not necessarily lead to the conclusion that the region C is treated any differently than the regions bounded by the circles in Fig. 3.

In this connection, the Examiner apparently relies on Wilder to show the different treatment of regions A,B in comparison to C. However, Wilder is directed not only to issues of reading out of data but also efficiencies in the initial sensor data acquisition. Col. 2, lines 18-21. In this connection, Wilder describes imaging of data within a region of interest and those outside that region of interest. Col. 2, lines 54-55. Therefore, to the extent that Wilder teaches disparate treatment of pixels, it is based on imaged regions but not on non-imaging regions. In fact, a principle object of the Wilder invention, to pick up the areas with different resolution, Applicant's would be negated if such different areas were not picked up in the first place. The Examiner's own rejection acknowledges that there is distinction between important and unimportant pixels in the invention of Wilder. In order to make the determination of whether a

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pixel is important or unimportant, that pixel must be picked up, e.g. imaged. Thus, it is clear that the basic efficiencies in Wilder stem not only from the read out of data but determinations of appropriate processing based on what has been picked up. Therefore, Applicants maintain that Wilder teaches away from the concept of processing based on a non-imaging region.

The Examiner's rebuttal on this point refers to col. 4, lines 57-66 of Wilder. The first discussion of supervisory signals supports the Applicant's position that image read out depends on the input received by the sensor of the various imaged portions. Col. 4, lines 58-62. The Examiner apparently relies on the sentence "Alternatively, the supervisory signals may be generated by the processor/computer pursuant to predetermined pixel readout instructions supplied to the processor/computer through conventional input devices (not shown)." However, this need not require pixel read out based on a non-image region, but may relate to other parameters such as gain, operator input for a region of interest as distinguished from an imaged region that falls outside of the region of interest or other criteria. The Examiner imparts too much into the general discussion in the reference when numerous other operations that do not relate to the claim language are also likely to be implicated.

In view of the foregoing, Applicant's maintain that each of independent claims 1-5 are patentable, along with their dependent claims. Applicant's note that Talmi does not make up for the deficiencies of the primary combination.

With further regard to claim 10, the Examiner relies on Wilder to teach prestored data to prevent reading of signal charges. The Examiner's rebuttal suggests reliance on the predetermined pixel read out instructions of Wilder as teaching the recited features of claim 10.

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However, the prestored data corresponds to areas of non-imaging and prevention of reading in these areas. To the extent that Wider "prestores" data, it need not be related to the prevention of reading as opposed to a different operational requirement for image read out. The Examiner's position lacks the probabilistic certainty necessary to maintain the rejection over Lazarev and Wilder. Claim 13 is patentable for similar reasons..

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

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